

**Invention: Suction System With High Efficiency Suction Control Valve**

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**Abstract**

An improved trachea suction system includes a suction catheter with a high efficiency suction control valve providing unobstructed fluid flow in its activated suction applied mode for removal of viscous secretions at a low level of applied input suction through the catheter. The valve also non-restrictive to air flow at the distal tip of the catheter. The valve ideally part of a closed tracheal suction system having a catheter isolator seal with a vortex action catheter cleaning chamber located in front of the isolator seal which takes advantage of the high efficiency characteristics of the suction control valve.

**Related Applications**

The inventor claims the full benefit of the following U.S. Provisional Patent

Applications: "Transverse Closed Tracheal Suction Device" filed February 5, 2001, application number 60/266,200; "Compact Closed Tracheal Suction Device" filed February 27, 2001, application number 60/271,481; and "High Efficiency Suction Control Valve" filed July 17, 2001, application number 60/305,774.